Aventis CropScience





EPA Correspondence No. 02-01A January 29, 2002



Ms. Elizabeth Vizard, Chemical Review Manager Special Review and Reregistration Division (7508C) Office of Pesticide Programs U.S. Environmental Protection Agency Room 266A, Crystal Mall 2 1921 Jefferson Davis Highway Arlington, Virginia 22202

Re: Aldicarb, PC Code No. 098301. TEMIK® brand Aldicarb Pesticide (EPA Registration Nos. 264-330, 264-331, 264-417, 264-426, 264-523).

Submission of Unsubmitted Aldicarb Studies Cited in the August 31, 2001 Aventis CropScience Response to the Reregistration Eligibility Decision Draft Chapter on Environmental Fate and Ecological Effects (MRID 45529101).

Submission of Environmental Fate Studies Required by EPA/SRRD in Letters Dated May 24, 2000 and October 24, 2000.

Dear Ms. Vizard:

As stated in the August 31, 2001 cover letter and in our response to the Reregistration Eligibility Decision (RED) draft chapter on environmental fate and ecological effects (see MRID 45529101), we are submitting previously unsubmitted environmental fate and ecological effects studies that address issues raised by EPA.

Most of the eight previously unsubmitted environmental fate studies were conducted in the late 1970s and early 1980s and were not intended for submission to EPA. Some of the studies are unpublished internal documents and others were taken directly from publications and have not been formatted according to PR Notice 86-5. However, regardless of their style and format, these studies are still pertinent to the issues raised in the draft RED chapter.

The six ecological effects studies were conducted specifically for use in Europe according to OECD Guidelines and were not previously submitted to EPA. However, these studies do address the issues raised in the RED chapter and, therefore, they are being submitted in support of the reregistration of aldicarb.

We are also submitting final reports for five of the environmental fate studies required by EPA/SRRD as outlined in a letter from Monica Alvarez dated May 24, 2000 and revised in a letter dated October 24, 2000. Also included is an interim report for the aldicarb aerobic soil degradation

study. The final reports for two aerobic soil degradation studies (aldicarb and aldicarb sulfone) will be submitted by the August 2002 due date.

Lastly, enclosed is a study titled, "1999-2000 TEMIK". User Study". This study provides pertinent information on the actual use of TEMIK. Data obtained in this study provide real-world information that can be used to refine risk assessments, particularly for worker and ecological risk calculations.

Enclosed are three copies each of the Transmittal Document and 21 environmental fate and ecological effects studies.

Please phone me at (919) 549-2870 if you have any questions about this submission or need additional information.

Sincerely

Larry R. Hodges, Ph.D.

Registration Manager

TRANSMITTAL DOCUMENT

Submission of Unsubmitted Addiearb Studies Cited in the August 31, 2001 Aventis CropScience Response to the Reregistration Eligibility Decision Draft Chapter on Environmental Fate and Ecological Effects (MRID 45529101)

Submission of Environmental Fate Studies Required by EPA/SRRD in Letters
Dated May 24,2000 and October 24, 2000

Aldicarb, PC Code No. 098301

TEMIK® brand Aldicarb Pesticide (EPA Registration Nos. 264-330, 264-331, 264-417, 264-426, 264-523)

21 DOCUMENTS

TRANSMITTAL DATE

January 29, 2002

Company Official:

Company Name:

Aventis CropScience

Company Contact:

Larry R. Hodges

(Name)

Telephone:

(919) 549-2870

Aventis CropScience
P.O. Box 12014
T.W. Alexander Drive
Research Triangle Park, N.C. 27709

Aventis CropScience P.O. Box 12014 T.W. Alexander Drive Research Triangle Park, N.C. 27709

BIBLIOGRAPHY OF SUBMITTED DATA

Document 1	MRID Number: 45592101
Scarborough, T.A. (2001). 199 Research Triangle Park, NC. A	99-2000 TEMIK® User Studies. Aventis CropScience,
Environmental Fate and Effe	cts Studies MRID Number: 45592102
Document 2	MRID Number:
McDaniel, R. L. and D. W. We Company, Research Triangle F 1987. 9 Pages.	eiler. (1987). Aldicarb Vapor Pressure. Rhone-Poulenc Ag Park, NC. Project No: 803P15. File No. 40052. June 29,
Document 3	MRID Number: 45592103
McDaniel, R. L. and D. W. We for Vapor Pressure Determination Project Report No. 40182. Nov.	eiler. (1987). Design and Validation of High Flow Apparatus ions. Rhone-Poulenc Inc., Research Triangle Park, NC. vember 12, 1987. 20 Pages.
D	MRID Number: 45592104
Document 4	
Andrawes, N. R. (1976). Hydr Solutions. Union Carbide Corp No. 22928. December 9, 1976.	rolysis of UC-21865 Sulfocarb Pesticide in Aqueous Buffer poration, South Charleston, WV. Project No. 111A14, File 27 Pages.
Document 5	MRID Number: PEJ (Ø5)
	g. (1983). Kinetics of Aqueous Base and Acid Hydrolysis e and Aldicarb Sulfone. J. Environ. Sci. Health,

B18(2):189-206.

Document 6	MRID Number: PEJ (Ø6)
Hansen, J.L. and M.H. Spiegel. (1 Sulfoxide and Aldicarb Sulfone. E	983). Hydrolysis Studies of Aldicarb, Aldicarb nyironmental Toxicology and Chemistry, (2):147-153.
Document 7	MRID Number: REJ (07)
Lemley, A.T. and W.Z. Zhong. (1 Aldicarb Sulfone at Parts per Billio (32):714-719.	984). Hydrolysis of Aldicarb, Aldicarb Sulfoxide, and n Levels in Aqueous Mediums. J. Agric. Food Chem.,
Document 8	MRID Number: PEJ (28)
Laboratory Studies on Mechanisms	ones, J.L. Hansen and R.R. Romine. (1987). s for the Degradation of Aldicarb, Aldicarb Sulfoxide atal Toxicology and Chemistry, (6):377-394.
Document 9	MRID Number: 45592105
Andrawes, N. R. (1976). Photocher Pesticide. Union Carbide Corporati No. 22936. December 13, 1976. 1	emical Transformation of UC 21865 Sulfocarb ion, South Charleston, WV. Project No. 111A14, File 7 Pages.
Environmental Fate Studies Req Monica Alvarez Dated May 24, 2	uired by EPA/SRRD Per Correspondence from
Document 10	MRID Number: 45592106
¹⁴ C]-Aldicarb in Two Soils Under	t: The Route and Rate of Degradation of [S-Methyl-Laboratory Aerobic Conditions at 25° C. (OPP §162-1) iangle Park, NC. Study No. 601YT. December 21,
Document 11	MRID Number: 45592107
	Aquatic Metabolism of [S-Methyl- ¹⁴ C]- Aldicarb Under

Jesudason, P.A. (2001). Aerobic Aquatic Metabolism of [S-Methyl-*C]- Aldicarb Under Laboratory Conditions at 25° C. (OPP §162-4). Aventis CropScience, Research Triangle Park, NC. Study No. 602YT. December 20, 2001. 127 Pages.

Document 12	MRID Number: 45592108 tic Metabolism of [S-Methyl-14C]- Aldicarb Sulfoxide
Liu, A.C. (2001). Aerobic Aquat	tic Metabolish of S-Methyl-14C]- Aldicarb Sulfoxide
Under Laboratory Conditions at 2	5° C. (OPP §162-4). Aventis CropScience, Research
Triangle Park, NC. Study No. 60	4YT. December 13, 2001. 135 Pages.
	45500100
Document 13	MRID Number: 45592109
Jesudason, P.A. (2001). Aerobic Under Laboratory Conditions at 2	Aquatic Metabolism of [S-Methyl- ¹⁴ C]- Aldicarb Sulfone 25° C. (OPP §162-4). Aventis CropScience, Research 3YT. December 20, 2001. 149 Pages.
Document 14	MRID Number: 45592110
Sulfoxide Under Laboratory Con-	oic Aquatic Metabolism of [S-Methyl- ¹⁴ C]- Aldicarb ditions at 25° C. (OPP §162-3). Aventis CropScience, dy No. 606YT. December 13, 2001. 107 Pages.
D	MRID Number: 45592111
	Aquatic Metabolism of [S-Methyl- ¹⁴ C]- Aldicarb Sulfone
Under Laboratory Conditions at 2	25° C. (OPP §162-3). Aventis CropScience, Research 05YT. December 13, 2001. 109 Pages.
Document 16	MRID Number: 45592112
Handley, J.W., I.G. Sewell and A Aldicarb on the Reproduction of U.K. Project Number 282/112.	A.J. Bartlett. (1991). An Assessment of the Effect of <i>Daphnia magna</i> . Safepharm Laboratories Ltd., Derby, September 18, 1991. 63 Pages.
Document 17	MRID Number: 45592113
(Lepomis macrochirus) Under St	arb: Acute Toxicity (96-Hour) to Bluegill Sunfish catic Conditions. Rhône-Poulenc Agro, Sophia Antipolis, 31. October 15, 1999. 74 Pages.
Ecotoxicology Studies Aldica	arb Sulfoxide
Document 18	MRID Number: 45592114
Handley, J.W., D. Grant-Salmon Aldicarb Sulfoxide to <i>Daphnia n</i> Number 282/442. January 6, 199	and A.J. Bartlett. (1995). The Acute Toxicity of magna. Safepharm Laboratories Ltd., Derby, U.K. Project 95. 25 Pages.

Document	19	. * MRID Number:	45	592	11	5
- COMILIONAL		 				

Odin-Feurtet, M. (1998). Aldicarb Sulfaxide: Acure Toxicity (96 hours) to Rainbow Trout (*Oncorhynchus mykiss*) Under Flow-Through Conditions. (EPA Guideline Number 72-1). Rhône-Poulenc Agro, Sophia Antipolis, France. Report Number SA 98081. July 10, 1998. 65 Pages.

Ecotoxicology Studies -- Aldicarb Sulfone

Document 20 MRID Number: 45592116

Gallagher, S.P., J. Grimes, J.B. Beavers and K.H. Martin. (1998). Aldicarb Sulfone: A Dietary LC50 Study with the Northern Bobwhite. (EPA Guideline Number 71-2). Wildlife International Ltd., Easton, MD. Project No. 171-136A. March 31, 1998. 79 Pages.

Document 21 MRID Number: 45592117

McElligott, A. (1998). Aldicarb Sulfone: Acute Toxicity (96 hours) to Rainbow Trout (*Oncorhynchus mykiss*) Under Flow-Through Conditions. (EPA Guideline Number 72-1). Rhône-Poulenc Agro, Sophia Antipolis, France. Report Number SA 98082. July 30, 1998. 64 Pages.